

In the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of improving security processing in a computing network, comprising ~~steps of:~~
 - providing security processing in an operating system kernel;
 - providing an application program which makes use of the operating system kernel during execution;
 - executing the application program; and
 - selectably securing at least one communication of the executing application program with a remotely executing application program using the provided security processing in the operating system kernel.
2. (Currently Amended) The method according to Claim 1, further comprising ~~the step of:~~
 - configuring ~~one or more ports~~ at least one port used by the provided application program such that communications using the ~~configured ports~~ at least one port are to be secured; and
 - wherein ~~the~~ selectably securing the at least one communication of the executing application program ~~step~~ then secures all communications using the ~~configured ports at least one port~~.
3. (Original) The method according to Claim 2, wherein the provided application program does not include code for security processing.
4. (Currently Amended) The method according to Claim 2, wherein ~~the~~ configuring ~~step~~ at least one port further comprises specifying information to be used ~~by~~ in ~~the~~ selectably securing ~~step~~ the at least one communication of the executing application program.

5. (Currently Amended) The method according to Claim 4, wherein the specified information comprises at least one ~~or more of~~: authentication information; cipher suites options; and security key input information.

6. (Currently Amended) The method according to Claim 2, wherein ~~the~~ configuring ~~step~~ at least one port comprises at least one ~~or more of~~: providing port definition statements; setting environment variables; and using job control language.

7. (Currently Amended) The method according to Claim 1, further comprising the ~~step of~~ providing, in the secure processing, support for at least one ~~or more~~ security directives.

8. (Currently Amended) The method according to Claim 7, further comprising the ~~step of~~ invoking, during execution of the provided application program, the at least one ~~or more of the provided security directives~~ directive.

9. (Currently Amended) The method according to Claim 7, wherein the at least one ~~provided security directives comprise~~ directive comprises at least one ~~or more of~~: access capability for a client certificate; access capability for a client identifier; a request to start operation of ~~the~~ selectably securing step the at least one communication of the executing application program; and a request to stop operation of ~~the~~ selectably securing step the at least one communication of the executing application program.

10. (Currently Amended) The method according to Claim 8, wherein the at least one ~~provided security directives include~~ directive comprises an access capability for a client certificate, and wherein ~~the~~ invoking step at least one security directive invokes the access capability, and further comprising ~~the step of~~ returning the client certification from the provided security processing to the executing application program in response to the invocation.

11. (Currently Amended) The method according to Claim 8, wherein the at least one provided security directives include directive comprises an access capability for a client identification, and wherein ~~the~~ invoking ~~step~~ at least one security directive invokes the access capability, and further comprising ~~the step of~~ returning the client identification from the provided security processing to the executing application program in response to the invocation.

12. (Currently Amended) The method according to Claim 1, further comprising ~~the steps of~~:

providing, in the secure processing, support for a security directive that requests ~~the~~ selectably securing ~~step~~ the at least one communication of the executing application program to begin operating; and

invoking the security directive; and

wherein ~~the~~ selectably securing ~~step~~ the at least one communication of the executing application program then secures all communications of the executing application program.

13. (Currently Amended) The method according to Claim 1, further comprising ~~the steps of~~:

providing, in the secure processing, support for a security directive that requests ~~the~~ selectably securing ~~step~~ the at least one communication of the executing application program to stop operating; and

invoking the security directive; and

wherein ~~the~~ selectably securing ~~step~~ the at least one communication of the executing application program then comprises stopping steps securing communications of the executing application program.

14. (Currently Amended) The method according to Claim 12, wherein the security directive specifies information to be used ~~by the~~ in selectably securing ~~step~~ the at least one communication of the executing application program.

15. (Currently Amended) The method according to Claim 14, wherein the specified information comprises at least one ~~or more of~~: authentication information; cipher suites options; and security key input information.

16. (Original) The method according to Claim 12, wherein a decision to invoke the security directive is made by the executing application program.

17. (Original) The method according to Claim 12, wherein a decision to invoke the security directive is made by carrying out, by the executing application program, a security negotiation protocol.

18. (Currently Amended) The method according to Claim 1, wherein the provided application program ~~includes~~ comprises calls that invoke security processing, and further comprising ~~steps of~~:

intercepting, in the provided security processing, the calls; and
executing, responsive to the interception, corresponding security functions.

19. (Currently Amended) The method according to Claim 1, wherein the provided application program ~~includes~~ comprises calls that invoke security processing, and further comprising ~~step of~~ interpreting, in the provided security processing, the calls as being non-operative.

20. (Currently Amended) The method according to Claim 18, wherein the provided application program may be executed on a system which does not include the provided security processing in the operating system kernel, in which case the calls operate to perform security processing instead of ~~the~~ selectably securing step the at least one communication of the executing application program.

21. (Original) The method according to Claim 1, wherein the provided security processing operates in a Transmission Control Protocol layer of the operating system kernel.

22. (Original) The method according to Claim 1, wherein the provided security processing implements Secure Sockets Layer.

23. (Currently Amended) The method according to Claim 1, wherein the provided security processing implements ~~Transaction~~ Transport Layer Security.

24. (Currently Amended) A system for improving security processing in a computing network, comprising:

means for performing security processing in an operating system kernel;

means for executing an application program which makes use of the operating system kernel during execution; and

means for selectably securing at least one communication of the executing application program with a remotely executing application program using the means for performing security processing, in a manner which is transparent to the executing application program.

25. (Currently Amended) A system for improving security processing in a computing network, comprising:

means for performing security processing in an operating system kernel;

means for executing an application program which makes use of the operating system kernel during execution; and

means for selectably securing at least one communication of the executing application program with a remotely executing application program using the security processing performed in the operating system kernel.

26. (Currently Amended) A computer program product for improving security processing in a computing network, the computer program product embodied on at least one or more computer-readable media and comprising:

computer-readable program code ~~means for performing~~ configured to perform security processing in an operating system kernel;

computer-readable program code ~~means for executing~~ configured to execute an application program which makes use of the operating system kernel during execution; and

computer-readable program code ~~means for selectably securing~~ configured to selectably secure at least one communication of the executing application program with a remotely executing application program using the security processing performed in the operating system kernel.